

5/46

24 14  
D3159-043

<b>DART AEROSPACE</b>	<b>Work Order:</b> 24707
<b>Description:</b> Bracket	<b>Part Number:</b> D3159-043
<b>Note:</b> D3159-043 / -0	(P B30-23000-259)
<b>Drawing:</b> D3159 Re	<b>Stack of 7</b>
	<b>Qty:</b> 7

Step	Location		By	Date	Qty
1	EXPEDITIN		KJ	05.10.26	
2	HAAS				
3	QC	Inspect Level 2	J.L	05.11.12	7
4	QC	Inspect Level 8	J.L	05.11.13	7
5	METAL / CNC-CELL	Deburr break all unmarked sharp edges .005 to 0.010	SAD	05/11/13	7
6 A	METAL	Form as per drawing (Note: -043 SHOWN)	SB	05/11/14	7
6 B	GA	C'sink holes as per Dwg. D3159	FF	05/11/15	7
7	FINISHING	Chemical conversion coat as per QSI 005 4.1	FF	05/11/15	7
8	STORES	Pick: Qty Part number Description Batch 1 MS21061L06 Nutplate M11735 2 MS20426AD3-4 Rivet M15786	FF	05/11/15	7
9	METAL	Assemble as per dwg.	FF	05/11/15	7
10	QC	Inspect Level 5		05.11.16	7
11	STORES	Identify and stock with P/N + B/N using fine point permanent ink marker Loc. 88		05/11/16	7
12	EXPEDITING	Close W/O Inspect level 21 Cost/part 1.18 Sur 05/11/21 7		05/11/22 7	7

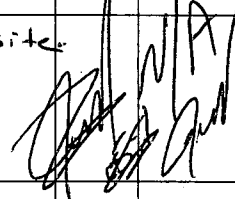
Rev	Date	Change	Revised By	Approved
A	02.05.13	New Issue	NG	02/05/13
A1	03.03.20	Added c'sink	RF	03.03.20

RELEASED

02/05/13

DF 04.11.29

P70  
CJ

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
05-11-16	6A	-043 Dwg is now A-044. -043 bend is going to be opposite. Dwg change is in process by Roberto. W/O has went from -043 to A-044.		05-11-16		u 05-11-16	2 05-11-16

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes ☒ No ☐ DQA: ☒ Date: 05/11/22

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

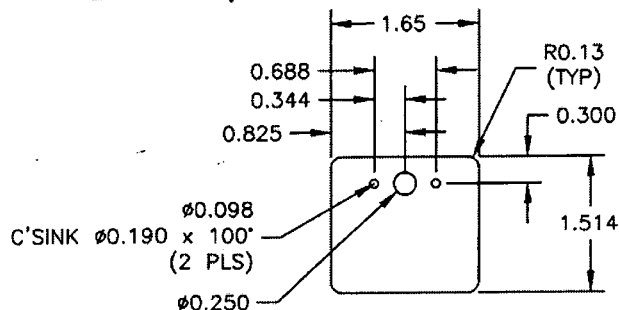
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

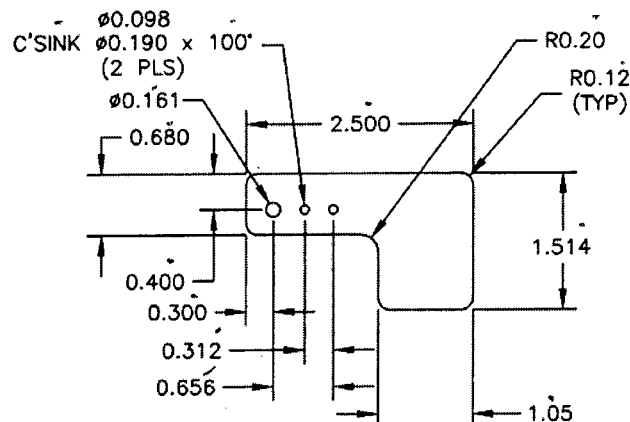


DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO. D3159	REV. B SHEET 1 OF 1
DATE 04.10.18	TITLE BRACKET ASSEMBLY		SCALE 1:2
A	02.04.30	NEW ISSUE	
B	04.10.18	ADD PART MARKING	

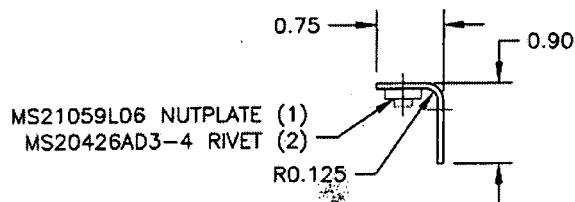
RELEASED  
04.11.23



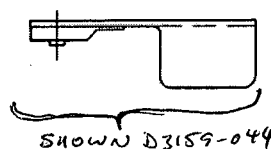
D3159-1 BRACKET FLAT PATTERN



D3159-3/-4 BRACKET FLAT PATTERN



D3159-041 BRACKET ASSEMBLY



D3159-043 BRACKET ASSEMBLY (SHOWN) TURN TO  
REPLACES PREMIER P/N B30-23000-259  
(D3159-044 BRACKET ASSEMBLY (OPPOSITE).  
REPLACES PREMIER P/N B30-23000-260)

NOTES:

- 1) MATERIAL: 6061-T6 (QQ-A-250/11) 0.063 THICK (REF. DART SPEC. M6061T6S.063)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) BREAK EDGES 0.005 TO 0.010
- 5) ALL DIMENSIONS ARE IN INCHES
- 6) IDENTIFY D3159-041/-043/-044 WITH DART P/N USING FINE POINT PERMANENT INK MARKER

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# Job Costing Report

Dart Aerospace Ltd.  
Hawkesbury

Oct 26, 2005  
03:12 pm

Work Order No : 0024707  
Project Name : D3159-043  
Project For : WK546  
Work Order Type : Main  
Main WO Number :  
House Part Number : D3159-043  
Description : Bracket Assembly  
Manufactured : Yes  
Amount Req'd : 2  
Amount Done : 0  
Start Date : 10-26-05  
Est Finish Date : 11-15-05  
Act Finish Date :  
Drawings Req'd : No  
Ok for Approval :  
Approval Rec'd :

Department Code:  
Burden Flags : NNNNNNNN  
WO Status : Open  
Invoice State : Not Invoiced  
Invoice Date :  
Invoice Number :  
Invoice Amount : 0.00  
Order Entry No :  
OE Value : 0.00  
Est Mark Up : 0.000%  
Actual Mark Up : 0.000%  
\$0 Posted to Finished Goods

	Estimated	Actual	Var. %	Posted	To Post
Material Cost :	0.00	0.00	0.00	0.00	0.00
Engineering Hours :	0.00	0.00	0.00		
Engineering Cost :	0.00	0.00	0.00	0.00	0.00
Production Hours :	0.00	0.00	0.00		
Production Cost :	0.00	0.00	0.00	0.00	0.00
Packaging Hours :	0.00	0.00	0.00		
Packaging Cost :	0.00	0.00	0.00	0.00	0.00
OverHead Hours :	0.00	0.00	0.00		
OverHead Cost :	0.00	0.00	0.00	0.00	0.00
CNC Hours :	0.00	0.00	0.00		
CNC :	0.00	0.00	0.00	0.00	0.00
Misc. Hours :	0.00	0.00	0.00		
Misc. :	0.00	0.00	0.00	0.00	0.00
Burden :	0.00	0.00	0.00		
Total Cost :	0.00	0.00	0.00		
Mark up :	0.000	0.000			
Selling Cost :	0.00	0.00			

	Estimated	Actual
Labour Hrs/Amount Done :	0.00	0.00
Profits/(Loss) :	0.00	0.00



Date: Thursday, 11/17/2005 6:00:34 PM  
 User: Linda Lacelle

## Process Sheet

<b>Customer</b> :	CU-DAR001 Dart Helicopters Services	<b>Drawing Name</b> :	BRACKET ASSEMBLY	
<b>Job Number</b> :	24707	<b>Part Number</b> :	D3159044	
<b>Estimate Number</b> :	10682	<b>Drawing Number</b> :	D3159 REV B	
<b>P.O. Number</b> :		<b>Project Number</b> :		
<b>This Issue</b> :	11/17/2005	<b>S.O. No.</b> :		
<b>Prsht Rev.</b> :	NC	<b>Drawing Revision</b> :	B	
<b>First Issue</b> :	1 /	<b>Material</b> :		
<b>Previous Run</b> :		<b>Due Date</b> :	11/24/2005	<b>Qty:</b> 7 <b>Um:</b> Each
<b>Written By</b> :				
<b>Checked &amp; Approved By</b> :				
<b>Comment</b> :	Est A 02.05.13 New Issue NG			

## Additional Product

Job Number:



## Description :

Seq. #: Machine Or Operation:

1.0 M6061T6S063

6061-T6 .063 Sheet

2.0 HAAS1

HAAS CNC VERTICAL MACHINING #1



**Comment:** HAAS CNC VERTICAL MACHINING #1  
 Machine as per Folio FA238

3.0 QC2

INSPECT PARTS AS THEY COME OFF MACHINE

**Comment:** INSPECT PARTS AS THEY COME OFF MACHINE

4.0 QC8

SECOND CHECK

**Comment:** SECOND CHECK

5.0 HAAS1

HAAS CNC VERTICAL MACHINING #1



**Comment:** HAAS CNC VERTICAL MACHINING #1  
 Deburr break all unmarked sharp edges .005 to 0.010  
 Form as per drawing (Note: -044 OPPOSITE)  
 C'sink holes as per Dwg D3159

Date: Thursday, 11/17/2005 6:00:34 PM  
User: Linda Lacelle

## Process Sheet

Customer: GU-DAR001 Dart Helicopters Services

Drawing Name: BRACKET ASSEMBLY

Job Number: 24707

Part Number: D3159044

Job Number:



Seq. #:	Machine Or Operation:	Description :
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6.0	HAND FINISHING1	HAND FINISHING RESOURCE #1
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Comment: HAND FINISHING RESOURCE #1  
Chemical Conversion Coat as per QSI 005 4.1

7.0	MS21061L06	Nutplate
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8.0	MS20426AD34	RIVET
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9.0	SMALL FAB 1	SMALL & MEDIUM FAB RESOURCE 1
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Comment: SMALL & MEDIUM FAB RESOURCE 1  
Assemble as per dwg.

10.0	QC5	INSPECT WORK TO CURRENT STEP
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Comment: INSPECT WORK TO CURRENT STEP

11.0	PACKAGING 1	PACKAGING RESOURCE #1
------	-------------	-----------------------



Comment: PACKAGING RESOURCE #1  
Identify with P/N and B/N using a permanent fine point marker, then Stock  
Location: \_\_\_\_\_

12.0	DC	DOCUMENT CONTROL
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Comment: DOCUMENT CONTROL  
Inspection Level 21

Job Completion



# Job Costing Report

Dart Aerospace Ltd.  
Hawkesbury

Nov 08, 2005  
12:45 pm

Work Order No : 0024707  
Project Name : D3159-04~~4~~  
Project For : WK546  
Work Order Type : Main  
Main WO Number :  
House Part Number : D3159-04~~4~~  
Description : Bracket Assembly  
Manufactured : Yes  
Amount Req'd : 2  
Amount Done : 0  
Start Date : 10-26-05  
Est Finish Date : 11-15-05  
Act Finish Date :  
Drawings Req'd : No  
Ok for Approval :  
Approval Rec'd :

Department Code:  
Burden Flags : NNNNNNNN  
WO Status : Open  
Invoice State : Not Invoiced  
Invoice Date :  
Invoice Number :  
Invoice Amount : 0.00  
Order Entry No :  
OE Value : 0.00  
Est Margin : 0.000%  
Actual Margin : 0.000%  
\$0 Posted to Finished Goods

	Estimated	Actual	Var. %	Posted	To Post
Material Cost :	0.00	0.00	0.00	0.00	0.00
Engineering Hours :	0.00	0.00	0.00		
Engineering Cost :	0.00	0.00	0.00	0.00	0.00
Production Hours :	0.00	0.00	0.00		
Production Cost :	0.00	0.00	0.00	0.00	0.00
Packaging Hours :	0.00	0.00	0.00		
Packaging Cost :	0.00	0.00	0.00	0.00	0.00
OverHead Hours :	0.00	0.00	0.00		
OverHead Cost :	0.00	0.00	0.00	0.00	0.00
CNC Hours :	0.00	0.00	0.00		
CNC :	0.00	0.00	0.00	0.00	0.00
Misc. Hours :	0.00	0.00	0.00		
Misc. :	0.00	0.00	0.00	0.00	0.00
Burden :	0.00	0.00	0.00		
Total Cost :	0.00	0.00	0.00		
Margin :	0.000	0.000			
Selling Cost :	0.00	0.00			

	Estimated	Actual
Labour Hrs/Amount Done :	0.00	0.00
Profits/(Loss) :	0.00	0.00



Date: Saturday, 11/19/2005 11:40:00 AM

User: Linda Lacelle

**INVENTORY ITEMS PICKED  
FOR SLIP NUMBER 62**

**Project No.** :  
**Customer** : Dart Helicopters Services  
**Part Number** : D3159044  
**Job Number** : 24707

**Drawing Number** : D3159 REV B  
**Drawing Name** : BRACKET ASSEMBLY  
**Due Date** : / /  
**Qty** : 7  
**Slip #** : 62

		Location	Store	Picking	Lot No.	Serial No.	Req'd	Taken
1.0	M6061T6S063 6061-T6 .063 Sheet							
	Available 186.00	MAIN			18556		21.27	21.2700 sf
7.0	MS21061L06 Nutplate							
	Available 7.00	MAIN			11735		7.00	7.0000 Each
8.0	MS20426AD34 RIVET							
	Available 6345.00	MAIN			15786		14.00	14.0000 Each